

Developmental Changes in Adolescents' Perceptions of Relationships with Their Parents

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Abstract This 4-wave longitudinal study examines developmental changes in adolescents' perceptions of parent–adolescent relationships by assessing parental support, conflict with parents, and parental power. A total of 951 early adolescents (50.4% boys) and 390 middle adolescents (43.3% boys) participated. Univariate and multivariate growth curve analyses showed that support declined from early to middle adolescence for boys and girls and increased from middle to late adolescence for girls, while stabilizing for boys. Conflict was found to temporarily increase during middle adolescence. Parental power (relative power and dominance of parents) decreased from early to late adolescence. Results indicated that: (1) parent–adolescent relationships become more egalitarian during adolescence, (2) parents perceived by adolescents as powerful are viewed as supportive, especially in early adolescence, and (3) perceived conflict with parents is related to but not an impetus for changes in parent–adolescent relationships towards more equality.

Keywords Parent–adolescent relationships · Development · Growth curves

Introduction

Over the course of adolescence, many changes take place in parent–child relationships. Whereas adolescents spend less and less time with their family, they focus increasingly on peers and activities outside the family (Brown 2004; Larson

et al. 1996). Many theories, such as neo-psychoanalytic perspectives, evolutionary perspectives, and socio-cognitive perspectives, suggest that the increasing autonomy and individuation during adolescence lead to a temporary decrease in closeness, an increase in conflicts, and gradually more equal power (Collins and Laursen 2004; Youniss and Smollar 1985).

Two theoretical perspectives are relevant when considering the role of conflict in this process towards increasing balance of power. According to the separation–individuation theory (Blos 1967), adolescents develop autonomy and become independent of parents, with parent–child conflicts stimulating the dissolution of ties to parents (Blos 1979; see also Zimmer-Gembeck and Collins 2003). Furthermore, the autonomy-relatedness perspective theorizes that adolescents develop more autonomy (Cooper et al. 1983; Grotevant and Cooper 1986), which may create a temporary dip in parent–child connectedness, although connectedness to parents remains important (Silverberg et al. 1992). An adjusted version of the separation–individuation perspective recognizes that children remain connected to their parents during the process of separation and individuation (Youniss and Smollar 1985). Thus, both perspectives state that distance in relationships is needed to redefine relationships, although under conditions of relatedness.

According to both the separation–individuation perspective and the autonomy-relatedness perspective, autonomy development is thought to entail changes in conflict and power in parent–adolescent relationships. Increasing desire for autonomy and differences in opinions of parents and adolescents about the timing of autonomy are thought to give rise to conflicts in parent–adolescent relationships (Montemayor 1983; Smetana 1989). Conflicts are thought to help adolescents to become more autonomous (Grotevant and Cooper 1986), and stimulate realignment of

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parent–adolescent relationships toward more age-appropriate expectations as parents relinquish their power (Collins et al. 1997). As a result of this process, adolescents gain more power and parent–adolescent relationships become more egalitarian and reciprocal.

These considerations suggest that adolescents' perceptions of parent–adolescent relationships change over time and that different relationship characteristics are linked over time. However, most studies on age-related changes in parent–adolescent relationships are based on cross-sectional data and have not examined associations between developmental changes in different relationship characteristics. Longitudinal research is needed to give a more decisive answer regarding the development of parent–adolescent relationships (Ruspini 1999).

This study provides more clarity on the development of parent–adolescent relationships by longitudinally examining both developmental changes in parent–adolescent relationships, as well as the interplay between these changes. The focus lies on the perceptions of adolescents regarding support, conflict, and power, which are key dimensions in many theories on development of parent–adolescent relationships. For example, attachment theory emphasizes support from parents in the form of shared activities, emotional ties, and care giving as a secure basis to explore the world outside the family and form new relationships (Collins and Laursen 2004). In addition, social relations models highlight interdependence, or the balance of power, in the form of mutual influences, reciprocity, and perceptions of equality as the main characteristic of close relationships (see Collins and Laursen 2004). The social relational perspective also recognizes that conflict is fundamental in close relationships, resulting from the need to integrate different objectives and expectations (Laursen and Collins 1994). This is especially relevant during adolescence, when parents and children have to adjust their relationships due to changing circumstances (Collins 1995). Because of the importance of support, conflict, and power in theories of adolescent development, we chose these dimensions to address in our study.

Development of Support, Conflict, and Power

In this section we will discuss empirical evidence grouped separately for findings on support, conflict, power, and gender differences. Within each part, first cross-sectional studies and then longitudinal studies are discussed. Also, when applicable, a distinction has been made between developments from early to middle adolescence and developments from middle to late adolescence. We will start by discussing previous studies on support.

Findings on age-related changes in perceived parental support are quite consistent. Cross-sectional studies have

reported that parental support declines from early to middle adolescence (Furman and Buhrmester 1992; Helsen et al. 2000; Meeus et al. 2005). In agreement with this, parental support, intimacy, and warmth, the latter two both aspects of support, were longitudinally found to decline from early to middle adolescence (Feinberg et al. 2003; Shanahan et al. 2007a; Wickrama et al. 1997). Cross-sectional studies showed that parental support stabilizes during late adolescence (Furman and Buhrmester 1992; Helsen et al. 2000; Meeus et al. 2005). This stabilization was longitudinally confirmed with respect to the development of warmth (Shanahan et al. 2007a). These findings suggest that support declines from early to middle adolescence and stabilizes thereafter.

When considering conflict, a cross-sectional study showed that early and middle adolescents reported higher levels of conflict with their parents than both pre- and late adolescents (Furman and Buhrmester 1992). In addition, a meta-analysis showed that conflict affect increased from early to middle adolescence and stabilized during late adolescence in between the levels of the two former age periods (Laursen et al. 1998). The increase in conflict during early adolescence was longitudinally confirmed (McGue et al. 2005). Overall, there seems to be consensus that conflict becomes more intense during early adolescence and less strong from middle to late adolescence. An explanation for increased conflict intensity during early adolescence can be found in biological changes linked with puberty (Steinberg 1981). At the apex of pubertal development the intensity of conflict in parent–adolescent relationships peaks (Hill and Holmbeck 1986; Laursen et al. 1998), which is suggested to be the result of parallel physical and cognitive changes as well as parents disagreeing with their children that physical development is an adequate reason to gain more autonomy (Collins and Laursen 2004). It should be noted, however, that the social learning perspective suggests that interaction styles in prior parent–child relationships are also very predictive of the development of conflict with parents during adolescence (see Aquilino 1997). In addition, it has recently been found that an increase in parent–adolescent conflict in two-or-more child families was related to the transition to adolescence of the firstborn child for both the first- and second-born children (Shanahan et al. 2007b).

Regarding power, a cross-sectional study showed that adolescents' perceived power in their relationships with parents was found to decline from pre-adolescence to early adolescence, to stabilize between early and middle adolescence, and to increase from middle to late adolescence (Furman and Buhrmester 1992). Other cross-sectional studies showed that children's autonomy in relationships with their parents linearly increased from early to middle adolescence (Beyers and Goossens 1999; Pinquart and

Silbereisen 2002) and that adolescent concession to the parent's viewpoint decreased from preadolescence to mid-adolescence (Smetana et al. 1991). These results suggest that the power of adolescents will increase during adolescence, and although no empirical evidence is available, this might be accompanied by a decline in power of the parents during adolescence.

With respect to gender differences, empirical studies show mixed results. For support, Furman and Buhrmester (1992) found no gender differences for boys and girls regarding mean level during early adolescence, but from middle to late adolescence they found an increase in mother–daughter dyads and stabilization for all other parent–child dyads. Other studies did not examine or find gender differences for boys and girls in mean levels or development of support (e.g. Feinberg et al. 2003; Helsen et al. 2000; Meeus et al. 2005; Lempers and Clark-Lempers 1992). With respect to gender differences for mothers and fathers, no support differences were found in pre- and early adolescence, whereas mothers were perceived as more supportive than fathers in middle and late adolescence (Furman and Buhrmester 1992).

Mixed findings have been reported with regard to conflict and power. Conflict in parent–adolescent relationships has been found to be higher for girls than for boys (Laursen 1995) and more conflicts occurred with mothers than with fathers (Laursen 1995; Smetana 1989). These gender differences can possibly be explained by the earlier pubertal development of girls, since parent–adolescent conflicts of earlier maturing adolescents are higher regarding both frequency and intensity (Collins and Laursen 2004). Also, both daughters and mothers are less avoidant regarding conflict (Laursen 1995) and conflicts are mainly on everyday issues (Smetana 1989) in which mothers are more involved (Collins and Laursen 2004; Laursen 1995).

Furman and Buhrmester (1992) did not find gender differences for boys and girls or for mothers and fathers regarding conflict, but reported that boys felt more powerful in relationships with their parents compared to girls and late adolescents felt more powerful in relationships with their mothers compared to relationships with their fathers. In contrast to the higher perceived power of boys, girls were found to be more autonomous than boys in early adolescence (Beyers and Goossens 1999; Pinquart and Silbereisen 2002), although this difference disappeared later in adolescence (Beyers and Goossens 1999). An explanation could be that girls' earlier pubertal timing accelerates autonomy development (Beyers and Goossens 1999). Even though there is inconsistency regarding the exact nature of the differences, these results suggest that gender differences are important to consider. We will therefore examine gender differences in the development of parent–adolescent relationships in an exploratory fashion.

From Inequality to Equality: An Interlinked Process

Not many studies have examined linkages between changes in support, conflict, and power during adolescence. Concurrent associations have been found between conflict and support: adolescents with more conflict with their parents were found to perceive their parents as less supportive (Jenkins et al. 2002). Similarly, a study among late adolescents found a significant negative correlation between parental social support and family conflict (Cutrona et al. 1994). Perceived parental support and perceived parental control were found to be positively correlated during early adolescence in a study with half of the parents being alcoholic (Stice et al. 1993). In line with this finding, positive correlations were found between closeness and parental authority in parent–adolescent relationships during early and middle adolescence (Laursen et al. 2000). Regarding conflict and control, a Chinese study showed that for 15-year-old a higher level of conflicts with parents was associated with greater parental control (Lau and Cheung 1987). Except for these findings, the current literature is remarkably devoid of concurrent and longitudinal associations between support, conflict, and power in parent–adolescent relationships.

Despite lack of empirical evidence regarding linkages in support, conflict, and power over time, theoretical considerations suggest that the development of support, conflict, and power might be interlinked in the process towards more equal parent–adolescent relationships in adolescence. According to the separation–individuation theory, parent–child conflicts stimulate the dissolution of ties to parents (Blos 1979; see also Zimmer-Gembeck and Collins 2003). This perspective would thus imply that higher levels of conflict lead to a decrease in parental power and support and also that parental support would stay low during middle and late adolescence. According to the autonomy-relatedness perspective (Allen et al. 1994; Grotevant and Cooper 1985), during early adolescence, conflict initiated by adolescents may lead to adjustment of relationships as parents relinquish their power (Collins et al. 1997). This perspective therefore implies that conflicts stimulate a decrease in parental power, but are not predictive of changes in parental support.

Aims of the Present Study

We will longitudinally examine how the mean levels of perceived parental support, perceived conflict, and perceived parental power in relationships with mothers and fathers develop during early adolescence from age 12 to 15 and during middle adolescence from age 16 to 19. We expect that parent–adolescent relationships will become more egalitarian over time and hypothesize that support

declines from early to middle adolescence and stabilizes from middle to late adolescence. In addition, we expect that conflict is stable from early to middle adolescence and decreases from middle to late adolescence, and we expect that parental power is stable from early to middle adolescence and decreases from middle to late adolescence.

We also will examine longitudinally how the developmental changes of perceived parental support, perceived conflict with parents, and perceived parental power are associated to each other over time within adolescent–mother and adolescent–father relationships. We expect that heightened levels of conflict with parents will stimulate change in parent–adolescent relationships. Based on the separation–individuation perspective, we expect a link between higher initial levels of conflict and decreases in perceived parental power and support. Based on the autonomy-relatedness perspective, we expect that higher initial levels of perceived conflict with parents are related to decreases in perceived parental power, but not in perceived parental support. We will explore gender differences in these developmental changes and associations between changes.

Method

Participants

Data for this study were collected as part of a longitudinal research project on CONflict And Management Of RELationships (Meeus et al. 2004, CONAMORE, Unpublished manuscript). Four waves were used with a one-year interval between each of the waves for all participants. The longitudinal sample consisted of a total of 1,341 participants: 648 boys (48.3%) and 693 girls (51.7%). Two age groups were represented: 951 early adolescents (70.9%), who were on average 12.4 years of age ($SD = .58$) and 390 middle adolescents (29.1%), who were on average 16.7 years of age ($SD = .80$) during the first wave of assessment. Because both age groups were assessed during four measurement waves, a total age range from 12 to 15 and from 16 to 19 years was available. The early adolescent group consisted of 479 boys (50.4%) and 472 girls (49.6%). The middle adolescent group consisted of 169 boys (43.3%) and 221 girls (56.7%). Most participants were Dutch (85.5%). Others identified themselves as part of a non-Western ethnic group. Most participants lived with both parents (85.1%). The participants were in junior high and high schools at time 1.

Procedure

The participating adolescents were recruited from various schools for secondary education in the province of Utrecht, The Netherlands. Before the study, both adolescents and

their parents received written information describing the research project and goals and explaining the possibility to decline from participation. If the adolescent wished to participate, both the adolescent and his or her parents were required to provide written informed consent. More than 99% of the approached pupils decided to participate. The questionnaires were completed at the participants' own school, during annual assessments. Confidentiality of responses was guaranteed. Verbal and written instructions were offered. Participants received €10 as a reward for every wave they participated in. The study was approved of by the Board of the Institute for the Study of Education and Human Development of Utrecht University.

Measures

Support

The support scale measures the amount of support from parents as perceived by adolescents for the relationships with their mothers and fathers separately. Support was assessed using the short version of the Network of Relationships Inventory (Furman and Buhrmester 1985, 1992). The support scale consisted of twelve items. Answers were indicated on a five-point Likert scale (ranging from 1 = *a little or not at all* to 5 = *more is not possible*). Examples of items are: “Does your mother like or approve of the things you do?” and “How much does your mother really care about you?”. An explorative factor analysis for three factors (support, conflict, and power) showed that all factor loadings were above .48 for support from mothers and above .41 for support from fathers, with no cross-loadings higher than .16 and .14 respectively. Stability correlations between subsequent waves were .52, .62, and .66 for support from mothers and .53, .63, and .64 for support from fathers. Internal consistencies were high with alphas of .88, .89, .90, and .91 over the waves for support from mothers, and alphas of .91, .91, .92, and .92 over the waves for support from fathers. The factor and construct validity of the NRI are adequate (Edens et al. 1999).

Conflict

The conflict scale assesses the intensity of conflict in relationships with their parents according to the perceptions of adolescents for the relationships with their mothers and fathers separately. The short version of the Network of Relationships Inventory (Furman and Buhrmester 1985, 1992) was used. The conflict scale consisted of six items. The participants indicated their answers on a five-point Likert scale (ranging from 1 = *a little or not at all* to 5 = *more is not possible*). Examples of items are: “Do you and your mother get on each other's nerves?” and “How

much do you and your mother get upset with or mad at each other?”. An explorative factor analysis showed that all factor loadings were above .68 for conflict with mothers and above .69 for conflict with fathers, with no cross-loadings higher than .06 and .09 correspondingly. Stability correlations between subsequent waves were .55, .56, and .57 for conflict with mothers and .56, .57, and .61 for conflict with fathers. Internal consistencies were high with alphas of .88, .89, .87, and .91 over the waves for conflict with mothers, and alphas of .90, .90, .90, and .92 over the waves for conflict with fathers.

Power

The power scale measures the amount of power the adolescents attributed to their parents, for the relationships with their mothers and fathers separately. Power was assessed by combining the relative power and the dominance subscales of the Network of Relationships Inventory (Furman and Buhrmester 1985, 1992). The power scale consisted of six items. Answers were given based on a five-point Likert scale (ranging from 1 = *a little or not at all* to 5 = *more is not possible*). Low scores on the power scale show that adolescents do not see their parents as more powerful, indicating that both adolescents and parents are equally powerful and have a high level of equality in their relationships. High scores indicate that adolescents perceive their parents as more powerful and feel their relationships are less equal. Examples of items are: “How often does your mother tell you what to do?” and “To what extent is your mother the boss in your relationship?”. An explorative factor analysis showed that all factor loadings were above .56 for power of mothers and above .59 for power of fathers, with no cross-loadings higher than .18 and .14 respectively. Stability correlations between subsequent waves were .49, .56, and .56 for power of mothers and .47, .56, and .60 for power of fathers. Internal consistencies were high with alphas of .83, .82, .85, and .87 over the waves for power of mothers, and alphas of .87, .87, .88, and .90 over the waves for power of fathers.

Results

Development of Support, Conflict, and Power

Plan for Analyses

To examine mean developmental changes in parent–adolescent relationships, we used univariate latent growth curve models (Duncan et al. 1999). Missing values were estimated in Amos with the Full Information Maximum

Likelihood (FIML) approach for model estimation. We tested the growth curves for linear and curvilinear change for each of twelve different variables: each relationship dimension (support, conflict, power), within each age cohort (early and middle adolescence), and for mothers and fathers separately. For all variables, the linear model had a better fit than the curvilinear model. The chi-squares of the linear models were smaller than the chi-squares of the curvilinear models in all cases and with similar degrees of freedom, with differences in chi-squares ranging from .57 to 103.94 with a mean of 47.83. For the linear models, CFI values were .98 or higher and RMSEA values were .07 or lower, whereas for the curvilinear models, CFI values were .98 or lower and RMSEA values were .08 or higher.

Subsequently, we used multigroup analyses with four groups (gender \times age) for each relationship dimension within each parent–adolescent relationship to examine differences between boys and girls and differences between early and middle adolescents. In the first model estimated, all four groups were constrained to be similar on every parameter, except for the random error components. Next, we stepwise released the intercept means, the slope means, the intercept and slope variances, and the covariances among intercepts and slopes. Using chi-square difference tests, we determined which parameter releases made a significant improvement to the model fit. The parameter releases that turned out to be a non-significant improvement to the model fit were again constrained to be similar in subsequent steps. Results and fit indices of the best fitting models from each of these series of analyses are displayed in Table 1. For the significant parameters releases, critical ratio comparisons were used to evaluate among which of the four groups the parameters differed significantly. Critical ratios are Z-scores that are used to test whether the difference between a pair of Pearson’s r or Spearman’s ρ correlations is significant. A critical ratio comparison shows a significant difference when the Z-score is above 1.96 or below -1.96 . We report the results of the better fitting multigroup models, but chose to discuss differences between boys and girls and early and middle adolescents only when a difference suggested by the model comparisons was confirmed by the critical ratios. Due to the complexity of the models and our specific focus on developmental changes, analyses were conducted for mothers and fathers separately and, therefore, mother–father differences were not statistically tested.

Parental Support

We found that early adolescents reported significantly more parental support than middle adolescents, except for early adolescent boys and middle adolescent girls in relationships with their mothers, who reported a similar level of support (see Table 1). Critical ratio comparisons of

Table 1 Estimated means from the best fitting multigroup models

| | | Mothers | | | | Fathers | | | |
|--------------------------|------------|---------------------|---------------------|----------------------|----------------------|----------------------|---------------------|---------------------|----------------------|
| | | Early | | Middle | | Early | | Middle | |
| | | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Support | | | | | | | | | |
| IC | M | 3.51** _b | 3.70** _c | 3.36** _a | 3.52** _b | 3.39** _b | 3.49** _c | 3.25** _a | 3.23** _a |
| | σ^2 | .21** _a | .21** _a | .28** _b | .28** _b | .26** _a | .36** _b | .26** _a | .36** _b |
| SL | M | -.05** _a | -.03** _a | .01 _b | .03* _b | -.05** _a | -.05** _a | -.01 _a | .06** _b |
| | σ^2 | .02** _a | .02** _a | .02** _b | .02** _b | .03** _a | .02** _a | .03** _a | .02** _a |
| Conflict | | | | | | | | | |
| IC | M | 1.41** _a | 1.41** _a | 1.63** _b | 1.63** _b | 1.41** _a | 1.41** _a | 1.64** _b | 1.64** _b |
| | σ^2 | .10** _a | .12** _a | .33** _b | .36** _b | .12** _a | .15** _a | .39** _b | .47** _b |
| SL | M | .04** _b | .07** _c | -.08** _a | -.07** _a | .03** _b | .07** _c | -.06** _a | -.08** _a |
| | σ^2 | .02** _a | .02** _b | .01** _{a,b} | .02** _{a,b} | .01** _a | .03** _b | .04** _b | .03** _b |
| Power | | | | | | | | | |
| IC | M | 2.75** _d | 2.67** _c | 2.48** _b | 2.37** _a | 2.64** _c | 2.52** _b | 2.48** _b | 2.26** _a |
| | σ^2 | .21** _a | .21** _a | .28** _b | .28** _b | .22** _a | .28** _b | .36** _b | .29** _b |
| SL | M | -.08** _b | -.08** _b | -.11** _a | -.11** _a | -.05** _b | -.05** _b | -.09** _a | -.09** _a |
| | σ^2 | .02** _a | .02** _a | .01** _a | .01** _a | .02** _{b,c} | .03** _c | .01 _a | .02** _{a,b} |
| Model fit indices | | | | | | | | | |
| | | df | χ^2 | NNFI | RMSEA | df | χ^2 | NNFI | RMSEA |
| Support | | 27 | 74.04** | .96 | .04 | 27 | 64.69** | .97 | .03 |
| Conflict | | 24 | 33.57 | .99 | .02 | 24 | 47.28** | .98 | .03 |
| Power | | 29 | 33.46 | 1.00 | .01 | 25 | 38.34* | .98 | .02 |

Note. Estimated parameters within each parent–adolescent relationship that do not share subscripts are significantly different with respect to gender at $p < .05$, two-tailed by critical ratios. Those parameters that are equal for boys and girls were constrained to be similar based on overall model testing with delta chi-squares

IC, Intercept; SL, slope

* $p < .05$; ** $p < .01$

intercept means showed that girls perceived their parents as significantly more supportive than boys, except for middle adolescent girls who perceived their fathers as equally supportive as middle adolescent boys did.

Support from both parents declined significantly from early to middle adolescence for both boys and girls in a similar way. From middle to late adolescence, support significantly increased for girls and stabilized for boys. Critical ratio comparisons of slope means showed that this developmental difference between boys and girls was significant for paternal support, but not for maternal support. Furthermore, critical ratio comparisons showed that the support slopes of the early and middle adolescents differed significantly, except for boys in relationships with fathers (see Figs. 1 and 2).

Conflict with Parents

Critical ratio comparisons showed that the initial level of conflict with fathers and mothers was significantly higher for middle adolescents than for early adolescents.

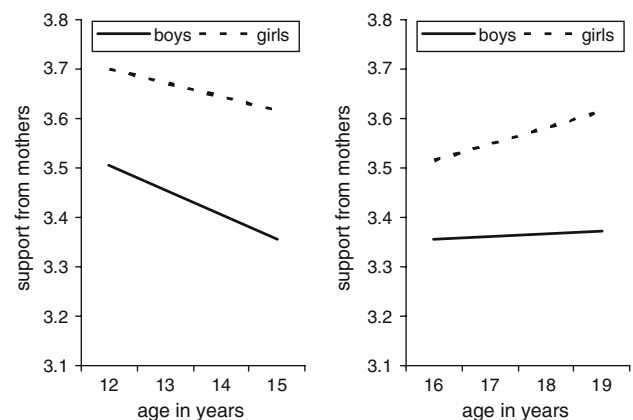


Fig. 1 Support from mothers over time for boys and girls

We found that conflict with mothers and fathers increased significantly from early to middle adolescence and declined significantly from middle to late adolescence for both boys and girls. Also, whereas the increase in conflict from early to middle adolescence was significantly

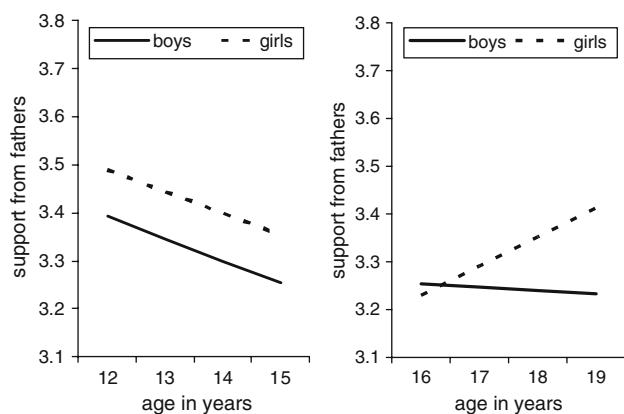


Fig. 2 Support from fathers over time for boys and girls

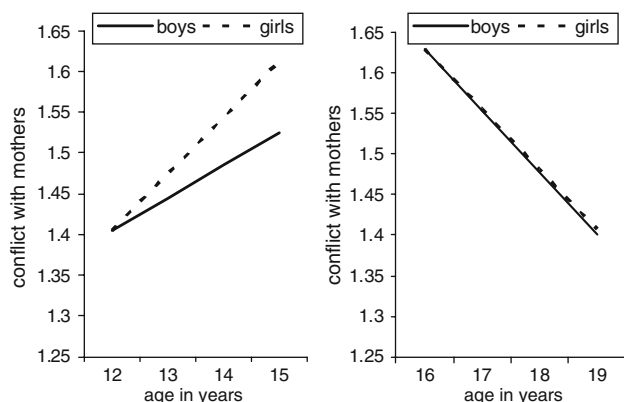


Fig. 3 Conflict with mothers over time for boys and girls

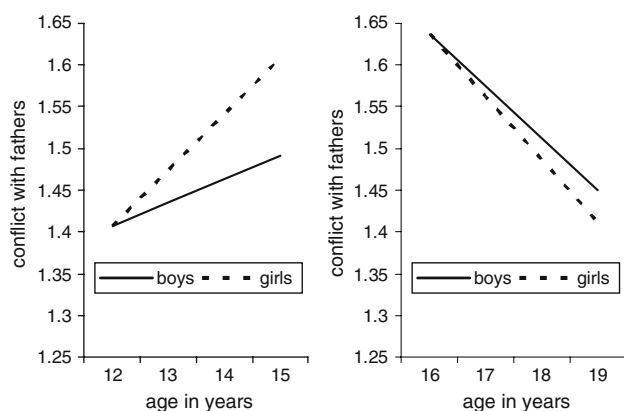


Fig. 4 Conflict with fathers over time for boys and girls

faster for girls than for boys, the decline of conflict from middle to late adolescence was found to be similar for boys and girls (see Table 1; Figs. 3 and 4).

Parental Power

It was found that early adolescents perceived their parents as more powerful than middle adolescents did, except for

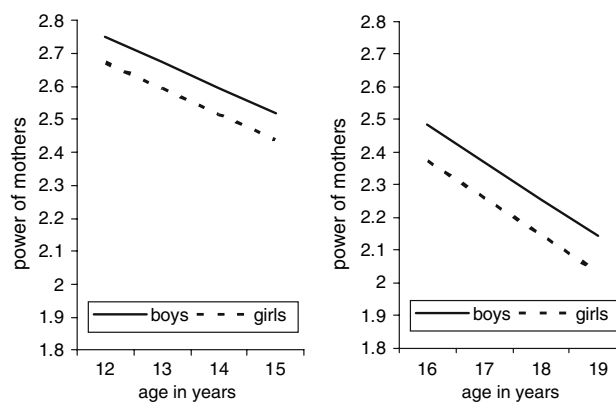


Fig. 5 Development of maternal power for boys and girls

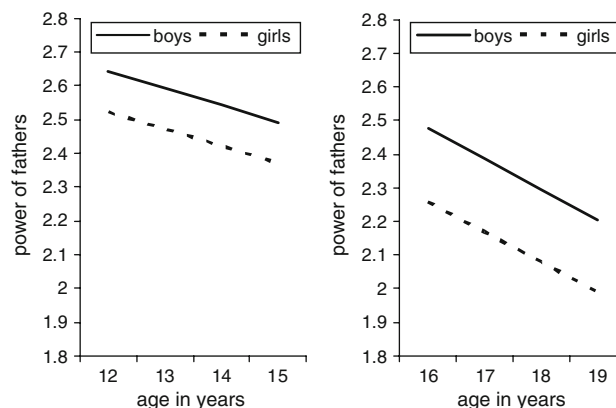


Fig. 6 Development of paternal power for boys and girls

early adolescent girls and middle adolescent boys in relationships with their fathers, who perceived their fathers as equally powerful. Critical ratio comparisons of intercept means showed that boys in both age groups perceived their parents as more powerful than girls did (see Table 1).

From early to middle and from middle to late adolescence, the power of both parents declined significantly for both boys and girls. The decline was found to be significantly faster from early to middle adolescence than from middle to late adolescence (see Figs. 5 and 6).

Linkages Between Support, Conflict, and Power in Parent–Adolescent Relationships

Plan for Analyses

To examine linkages between mean developmental changes in parent–adolescent relationships, we used multivariate latent growth curve models separately for early and middle adolescence. Intercept and slope means and variances were constrained to the estimated values from the univariate multigroup growth curve analyses. For middle to late adolescent boys, the paths to the slope of

power in relationships with their fathers were not estimated, because of insignificant slope variance of power. We used four two-group analyses to examine gender differences for each age group for mothers and fathers separately. At first, boys and girls were constrained to be similar on every path. Next, we released the concurrent correlations, the intercept–slope paths within the same variable, the cross-paths, and the correlated changes one by one. Using comparisons of chi-squares and degrees of freedom, we determined which parameter releases significantly improved the model fit. Those parameters were all released in the final models. Fit indices and results of the best fitting models are displayed in Table 2. Again, we report the results of the better fitting multigroup models, but we chose to discuss differences between boys and girls only when a gender difference suggested by the model comparisons was confirmed by the critical ratios. Due to

the complexity of the models and our specific focus on developmental linkages, analyses were conducted for mothers and fathers separately and, therefore, mother–father differences were not statistically tested.

Linkages in Early Adolescence

Support–conflict links. When considering the linkages between support and conflict, we found that the intercepts of support and conflict were significantly negatively correlated (see Figs. 7 and 8). This means that a higher initial level of support from fathers and mothers was related to a lower initial level of conflict with fathers and mothers. In relationships with their fathers, a significant difference between the intercept–intercept correlation for boys and girls was found ($z = -2.34$). When considering the standardized correlations, this difference did not appear to be

Table 2 Results of multigroup multivariate latent growth curve models

| Relation type | Mothers | | | | Fathers | | | |
|---------------------------|--------------------|------------------|---------------------|---------------------|---------------------|---------------------|--------------------|------------------|
| | Early | | Middle | | Early | | Middle | |
| | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| IC–IC correlations | | | | | | | | |
| Support ↔ Conflict | -.51** | -.48** | -.57** _a | -.66** _a | -.47** _a | -.49** _b | -.67** | -.51** |
| Support ↔ Power | .26** | .26** | .02 | .02 | .39** _a | .33** _a | .25** _a | .07 _a |
| Conflict ↔ Power | .01 | .01 | .21** | .20** | .26** _a | .18** _a | .22** _a | .05 _a |
| IC–SL paths | | | | | | | | |
| Support → Support | .03 | .03 | .00 | .00 | .16** | .19** | -.05 | -.06 |
| Conflict → Conflict | -.15** | -.13** | -.54** | -.47** | -.00 | -.00 | -.45** | -.52** |
| Power → Power | -.24** | -.24** | -.26** | -.26** | -.23** | -.24** | .X | -.08 |
| IC–SL cross-paths | | | | | | | | |
| Support → Conflict | .01 | .01 | .13** | .11** | .06 | .05 | .15** | .18** |
| Support → Power | .05 | .05 | .14* | .14* | .05 | .06 | .X | .02 |
| Conflict → Support | .25** | .27** | .35** | .36** | .33** | .38** | .24** | .28** |
| Conflict → Power | .23** | .24** | .09 | .10 | .22** | .22** | .X | .11 |
| Power → Support | -.23** | -.23** | -.22* | -.22* | -.44** | -.50** | -.09 | -.09 |
| Power → Conflict | .09 | .07 | .15 | .13 | -.07 | -.06 | .07 | .06 |
| SL–SL correlations | | | | | | | | |
| Support ↔ Conflict | -.84** | -.67** | -.76** _a | -.88** _a | -.54** _a | -.60** _a | -.57** | -.67** |
| Support ↔ Power | .52** _a | .06 _b | -.04 | -.04 | .56** | .53** | .X | -.12 |
| Conflict ↔ Power | .36** | .29** | .50** | .40** | .32** _a | .43** _b | .X | .51** |
| Fit indices | | | | | | | | |
| CMIN/DF | 4.10 | | 2.38 | | 5.00 | | 2.75 | |
| CFI | .88 | | .92 | | .86 | | .89 | |
| RMSEA | .06 | | .06 | | .07 | | .07 | |

Note. For the released paths estimated means in the same column within each parent–adolescent relationship and within each age group that do not share subscripts are significantly different with respect to gender at $p < .05$, two-tailed by critical ratios. The parameters without subscript were found to be similar in overall model testing with delta chi-squares

.X, These paths were not included in the analyses, due to a non-significant variance of the slope of power

IC, Intercept; SL, slope

* $p < .05$; ** $p < .01$

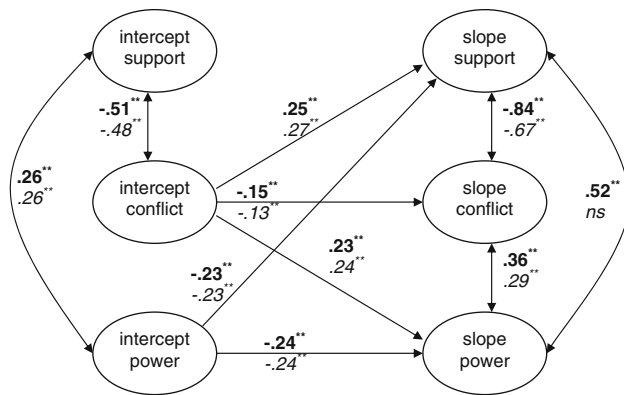


Fig. 7 Linkages in adolescent-mother relationships from early to middle adolescence Note. Bold = boys, italic = girls. Only significant paths are drawn

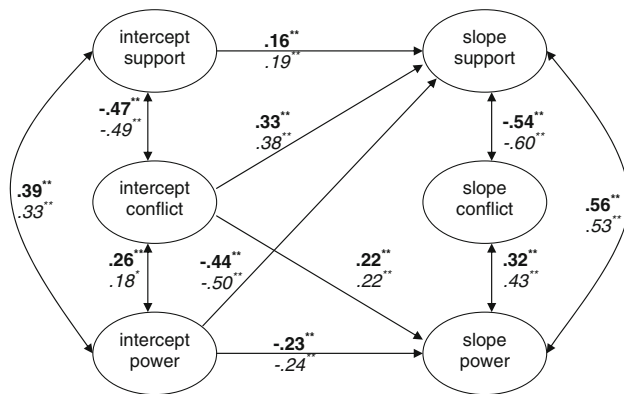


Fig. 8 Linkages in adolescent-father relationships from early to middle adolescence Note. Bold = boys, italic = girls. Only significant paths are drawn

relevant ($-.47$ vs. $-.49$, see Table 2). We also found significant negative correlated change between the slopes of support and conflict, which means that a greater decrease in support was related to a greater increase in conflict. Also, the intercept of conflict was positively related to the slope of support, indicating that a higher initial level of conflict was related to a smaller decrease of support. However, this last finding could also be due to regression to the mean, in that higher initial levels of conflict were also related to lower initial levels of support and lower initial levels of support cannot decrease that much anymore. An indication for regression to the mean is that both the intercepts of support and conflict were negatively related and the slopes between support and conflict were negatively related.

Support-power links. Intercepts of support and power were found to be significantly positively correlated (Figs. 7 and 8), which shows that a higher initial level of support was related to a higher initial level of power. We also found a positive correlation between the slopes of support and power for all dyads, indicating that a greater decrease

in support was related to a greater decrease in power, except for mother-daughter dyads (.56, .53, and .52 vs. .06, see Table 2). Furthermore, the intercept of power was negatively related to the slope of support, indicating that a higher initial level of power was related to a faster decrease of support. This could, however, also be regression to the mean in that higher initial levels of power were also related to higher initial levels of support and higher initial levels of support can only move down considering there is much room to regress to the lower mean. Relatively to the average development in the sample, high scorers seem to move down faster. Again, an indicator for regression to the mean is that both the intercepts of support and power and the slopes of support and power were related in the same way, in this case both positively.

Conflict-power links. The intercepts of conflict and power were found to be significantly positively correlated only in the relationships with fathers. This means that a higher initial level of conflict with fathers was related to a higher initial level of power of fathers. Moreover, the intercept of conflict was positively related to the slope of power, indicating that a higher initial level of conflict was related to a relatively smaller decrease of power. A positive correlation between the slopes of conflict and power showed that a greater increase in conflict was related to a smaller decrease in power. In relationships with their fathers, differences between slope-slope correlations of conflict and power were found for boys and girls, with a stronger correlation for girls compared to boys (see Table 2).

Linkages in Middle Adolescence

Support-conflict links. We found a negative intercept-intercept correlation between support and conflict for all adolescents in relationships with both fathers and mothers, indicating that a higher level of support was related to a lower level of conflict. Furthermore, we found a negative slope-slope correlation between support and conflict for both parent-adolescent relationships, which shows that a greater increase in support was related to a greater decrease in conflict (Figs. 9 and 10).

We also found a positive intercept-slope correlation between support and conflict for relationships with both parents, indicating that a higher initial level of support was related to a relatively smaller decrease of conflict. This effect could, however, be due to regression to the mean. For instance, higher initial levels of support were related to lower initial levels of conflict and for lower initial levels of conflict there is less room to move downwards over time.

The same could be true for the positive intercept-slope correlation we found between conflict and support for relationships with both parents, indicating that a higher initial level of conflict was related to a relatively greater

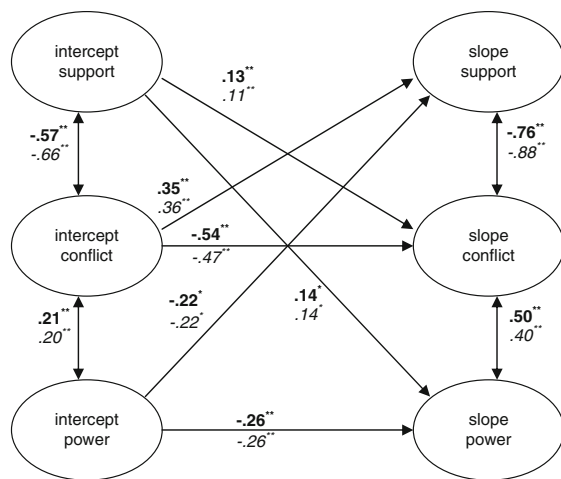


Fig. 9 Linkages in adolescent–mother relationships from middle to late adolescence *Note.* Bold = boys, italic = girls. Only significant paths are drawn

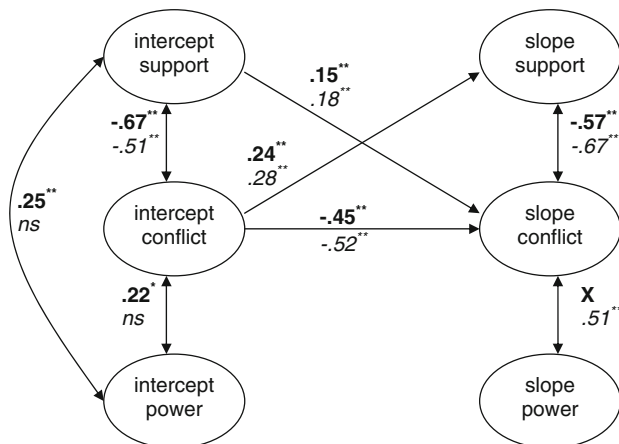


Fig. 10 Linkages in adolescent–father relationships from middle to late adolescence *Note.* Bold = boys, italic = girls. Only significant paths are drawn

increase of support. For instance, higher initial levels of conflict were related to lower initial levels of support and lower initial levels of support have much room to move upwards over time to the higher mean. In these cases, the negative correlation between the intercepts of support and conflict and the negative correlation between the slopes of support and conflict are indicative of regression artifacts.

Support–power links. A positive intercept–intercept correlation between support and power was found only in father–son dyads. This means that in father–son relationships a higher level of support is related to a higher level of power. Only for relationships with mothers, we found a significant positive correlation between the intercept of support and the slope of power and a significant negative

correlation between the intercept of power and the slope of support. This means that more supportive mothers had a smaller decrease in power, whereas mothers who were perceived by adolescents as more powerful revealed a smaller increase, or greater decrease, in support. The association between a higher level of power and a greater decrease of support could also be an indication of a changing function of power: in early adolescence, parental power might be accepted and needed, whereas in middle adolescence parental power might be considered to be intrusive.

Conflict–power links. We found a positive intercept–intercept correlation between conflict and power for all dyads except for father–daughter dyads, which means that a higher initial level of conflict was related to a higher initial level of power. Furthermore, we found a positive slope–slope correlation between conflict and power for the relationships with both parents, except for father–son dyads, for whom this path was not estimated because of insignificant slope variance of power. So for mother–daughter, mother–son, and father–daughter relationships, a greater decrease in conflict was related to a greater decrease in power.

Discussion

In this study, we investigated developmental changes in parent–adolescent relationships towards more equality by examining perceived parental support, perceived conflict with parents and perceived parental power with both fathers and mothers from age 12 to 15 and from age 16 to 19. The longitudinal design allowed us to extend earlier findings about the development of these relationship characteristics. Moreover, we examined the way these changes were interlinked over time to test whether or not conflicts with parents played a central role in the development of parent–adolescent relationships towards greater equality.

Development Towards More Equality of Power

Our results confirm that parent–child relationships converge towards more age-appropriate horizontal and egalitarian relationships over the course of adolescence (Russell et al. 1998). Overall, regarding developmental changes not many differences were found between relationships with fathers and mothers or between boys and girls (see Russell and Saebel 1997), suggesting that relationships with both parents generally develop similarly for boys and girls. For perceived parental power, we found a decrease from early to middle and from middle to late

adolescence for both boys and girls. This decline was found to be significantly faster from early to middle adolescence than from middle to late adolescence. Although we found perceived parental power to decline earlier than expected (Furman and Buhrmester 1992), these results confirm that the power balance in parent–child relationships becomes less asymmetrical during adolescence (Laursen and Bukowski 1997).

Furthermore, our findings show that the transition to more equality in parent–adolescent relationships is accompanied by changes in support and conflict. As expected (Furman and Buhrmester 1992), we found perceived support from mothers and fathers to decline from early to middle adolescence for both boys and girls and to stabilize from middle to late adolescence, although only for boys. In contrast to our hypothesis, support increased significantly from middle to late adolescence for girls. For perceived conflict with mothers and fathers, we found a significant increase from early to middle adolescence and a significant decline from middle to late adolescence for both boys and girls. This confirms that conflict is most intense during middle adolescence (Laursen et al. 1998). Thus, as parent–adolescent relationships become more egalitarian over time, support from parents temporarily decreases and conflict with parents temporarily increases.

Developmental Linkages Between Support, Conflict, and Power

In concurrence with the idea that parent–adolescent relationships become more egalitarian over time (Youniss and Smollar 1985), we found a generally significant positive relation between perceived parental support and perceived parental power in early adolescence, but not in middle adolescence. Whereas in early adolescence, parents perceived by adolescents as powerful were viewed as supportive, this link diminished for the greatest part during middle adolescence. This finding suggests that during middle adolescence a change takes place regarding adolescents' perceptions of parental power from a positive and legitimate to a neutral and less legitimate function in increasingly egalitarian relationships. Possibly, early adolescents tend to comply automatically with parents' dominant suggestions and see them as legitimate and supportive, whereas middle adolescents desire more autonomy from more dominant parents and as a result perceive these parents as less supportive over time.

Although we concluded before that adolescent relationships with both mothers and fathers generally develop similarly, two relevant differences appeared with respect to developmental linkages between support, conflict, and power. First, it appeared that the link between a greater increase in conflict and a smaller decrease in power from

early to middle adolescence was especially strong in father–daughter relationships. This suggests that, specifically in father–daughter relationships with highly increasing levels of conflict, daughters perceive their fathers as remaining relatively dominant. Second, the link between support and power partly continued from middle to late adolescence in mother–adolescent relationships, whereas in father–adolescent relationships this link disappeared after middle adolescence. It seems that in mother–adolescent relationships issues of power and support continue to play an important and rather contradictory role. On the one hand, mothers who were perceived by middle adolescents as more powerful were considered to be relatively less supportive over time, suggesting that middle to late adolescents perceive maternal power as unwanted and intrusive. On the other hand, supportive mothers remained more powerful over time, suggesting that middle to late adolescents still appreciate more dominant mothers and see them as a guide.

Contributions and Implications

Although both the separation–individuation (Blos 1967) and the autonomy-relatedness perspectives (Cooper et al. 1983; Grotevant and Cooper 1986) provide indications for conflict as an impetus for change towards more equality in parent–adolescent relationships (Blos 1979; see also Zimmer-Gimbeck and Collins 2003), our findings did not confirm this assumption. No relations between initial conflict and greater decreases in power were found. Hence, perceived conflict with parents turned out not to be an impetus for changes in power towards greater equality. Instead, our findings suggest that initial levels and changes in support, conflict, and power tend to co-occur. Adolescents who perceive higher levels of conflict with parents also perceive higher levels of parental power and lower levels of parental support. Greater increases in perceived conflict were related to relatively small decreases in perceived parental power and relatively large decreases in perceived parental support. So, when adolescents perceive many conflicts with their parents, they see them as relatively non-supportive power figures and this remains the same over the course of adolescence, yet parental power does not decrease faster when adolescents perceive more conflicts with their parents. Thus, our assumption that perceived conflict with parents would be an impetus for changes in perceived parental power was not confirmed. Even though our results confirm the process suggested by both perspectives that adolescents become more autonomous and parent–adolescent relationships become more equal (Blos 1967; Grotevant and Cooper 1986), the hypothesis that this process is stimulated by parent–adolescent conflict has to be rejected. Apparently, the relationship adjustment toward

greater equality is related to, but not stimulated by, conflict with parents.

The conclusion that parent–adolescent relationships do indeed become increasingly equal over time is consistent with the suggestion of both the separation–individuation perspective and the autonomy-relatedness perspective that adolescents develop towards more independence and autonomy over time. The decline and later stabilization of support across adolescence for boys supports the separation–individuation perspective that parent–adolescent relationships become more detached, whereas the decrease in perceived parental power concurs with the growing individuation and autonomy of adolescents, as implied by both the separation–individuation and the autonomy-relatedness perspectives. Also, consistent with the autonomy-relatedness perspective is the finding that conflict is not predictive of changes in perceived parental support. The significant paths between initial conflict and changes in support were in the opposite direction, that is, a higher level of conflict was related to a smaller decrease of support instead of a greater decrease of support. Furthermore, these effects probably indicate regression to the mean in the sense that those who reported higher initial levels of conflict reported low support to begin with, and support could therefore not decline that much anymore. Even though support does decline from early to middle adolescence, the overall level of perceived parental support remains rather high over the course of adolescence, indicating that adolescents and their parents remain connected (see Silverberg et al. 1992).

Strengths and Limitations

The current study has several important strengths. To start with, the design allowed for longitudinal analyses on the development of perceived parental support, perceived conflict with parents, and perceived parental power in parent–adolescent relationships, thereby extending current knowledge based mainly on cross-sectional studies. The development of parent–adolescent relationships was examined in two age groups from early to middle adolescence and from middle to late adolescence, thanks to the availability of a total age range from 12 to 15 and from 16 to 19 years. Furthermore, by using latent growth curve models, more insight has been gained on linkages over time between these relationship characteristics in parent–adolescent relationships. In this way, our study makes a relevant contribution to the current knowledge on the development of parent–adolescent relationships.

The current study also has several limitations. Despite the longitudinal design, this study was nevertheless limited in that two groups of participants were assessed over four measurement waves, instead of one group that was

assessed from early to late adolescence. Even though it is not possible to see what happens exactly between ages 15 and 16, the developmental changes suggest that the gap between the two age groups is due to a curvilinear growth pattern throughout adolescence. In future research a longitudinal design that covers the entire age period of adolescence would be preferable.

Another limitation was that the data were based on self-reports of adolescents and therefore describe only adolescents' perceptions of parent–adolescent relationships. This is specifically problematic considering that parents and adolescents often report different perceptions (Renk et al. 2008; Vierhaus and Lohaus 2008). On the other hand, it has been frequently found that adolescents more accurately report about their relationships than parents with respect to unpleasant aspects and that adolescents' perceptions regarding conflict are more likely to match reports from independent observers (Collins and Laursen 2004). Furthermore, relationship quality is for a large part in the 'eye of the beholder' (Branje et al. 2002) and adolescents' perceptions of parent–adolescent relationships might influence parent–adolescent interactions and adolescent developmental outcomes. Nevertheless, using observations or multi-informant questionnaires could give more information on development in these relationships.

Conclusions

Taken as a whole, our study provides three conclusions: (1) parent–adolescent relationships become more egalitarian during adolescence, (2) parents perceived by adolescents as powerful are viewed as supportive and vice versa, especially in early adolescence, and (3) perceived conflict with parents is related to but not an impetus for changes in parent–adolescent relationships towards more equality. Adolescents who perceive many conflicts with their parents see them quite consistently as non-supportive power figures and this does not change throughout adolescence. We found support for both the separation–individuation and the autonomy-relatedness perspectives regarding the decrease of parental power, which reflects increasing adolescent autonomy. Furthermore, we found support for the separation–individuation perspective with respect to the decrease in parental support, reflecting separation from parents. Although changes in conflict tended to go hand in hand with changes in power, these changes were not stimulated by conflict with parents. Since conflict with parents was theorized but not found to play a significant role in the development of parent–adolescent relationships, future research should include other indicators that could possibly stimulate change in parent–adolescent relationships towards more equality.

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